

Abstract Of The Disclosure

- 5 Described herein is a method and apparatus for transmission that provides the performance of space time spreading (STS) or orthogonal transmit diversity (OTD) and the backwards compatibility of phase sweep transmit diversity (PSTD) without significantly degrading performance in additive white gaussian noise (AWGN) conditions using a transmission architecture that incorporates STS/OTD and a form of phase sweep transmit diversity (PSTD) referred to herein as biased PSTD, which involves transmitting a signal and a frequency swept version of the same signal over diversity antennas at different power levels to reduce the depths of nulls normally seen in AWGN conditions when regular PSTD is utilized.